Albert Einstein College of Medicine
Microbiology & Immunology Department
1300 Morris Park Avenue, Bronx, NY 10461
Tel: (718) 430-3282 / Fax: (718) 430-8711
e-mail: tdragic@aecom.yu.edu

Education & Research Experience

1988: B.S. in Biochemistry - University of Paris 6, Paris, France
1989: M.S. in Molecular and Cellular Biology - University of Paris 6, Paris, France
Laboratory of Hormones and Reproduction, Kremlin-Bicetre Hospital, Paris, France
1994: Ph.D. in Molecular and Cellular Biology - University of Paris 6, Paris, France
Cochin Institute of Molecular Genetics, Paris, France
1998: Post-doctoral training
Aaron Diamond AIDS Research Center, The Rockefeller University, New York, NY

Appointments

1999: Staff Investigator, Aaron Diamond AIDS Research Center,
Assistant Professor, The Rockefeller University, New York, NY
2000: Assistant Professor, Department of Microbiology and Immunology
Albert Einstein College of Medicine, Bronx, NY

Fellowships and Awards

1989: French Ministry of Research and Technology Doctoral Fellowship (France)
1992: Association for AIDS Research Doctoral Fellowship (France)
1995: Association for Cancer Research Post-Doctoral Award (France)
1995: Aaron Diamond Foundation Post-Doctoral Fellowship
2001: Speaker's Fund for Biomedical Research, Award for Individual Investigators

Original Research Publications

1) Gougeon M-L., R. Olivier, S. Garcia, D. Guetard, **T. Dragic**, C. Dauguet and L. Montagnier. 1991. Evidence for an engagement process towards apoptosis in lymphocytes of HIV-infected patients. *C. R. Acad. Sci. Paris*, t.312: 529-537

2) Dragic T., P. Charneau, F. Clavel and M. Alizon. 1992. Complementation of murine cells for human immunodeficiency virus envelope/CD4-mediated fusion in human/murine heterokaryons. *J. Virol.* 66: 4794-4802

3) Dragic T. and M. Alizon. 1993. Different requirements for membrane fusion mediated by the envelopes of human immunodeficiency virus types 1 and 2. *J. Virol.* 67: 2355-2359

4) Alizon M. and **T. Dragic**. 1994. CD26 antigen and HIV fusion? *Science* 264: 1161-1162

5) Lazaro I., D. Naniche, N. Signoret, A.M. Bernard, D. Marguet, D. Klatzmann, **T. Dragic**, M. Alizon and Q. Sattentau. 1994. Factors involved in entry of the human immunodeficiency virus type 1 into permissive cells: lack of evidence of a role for CD26. *J. Virol.* 68: 6536-6546.

6) Dragic T., L. Picard and M. Alizon. 1995. Proteinase-resistant factors in human erythrocyte membranes mediate CD4-dependent fusion with cells expressing HIV-1 envelope proteins. *J. Virol.* 69: 1013-1018

7) Dragic T., V. Litwin, G.P. Allaway, S. Martin, Y. Huang, K. Nagashima, C. Cayanan, P.J. Maddon, R. Koup, J.P. Moore and W.A. Paxton. 1996. HIV-1 entry into CD4+ cells is mediated by the chemokine receptor CC CKR-5. *Nature* 381: 667-673

8) Trkola A., **T. Dragic**, J. Arthos, J. Binley, W.C. Olson, G.P. Allaway, C. Cheng-Mayer, J. Robinson, P.J. Maddon and J.P. Moore. 1996. CD4-dependent, antibody-sensitive interactions between HIV-1 and its co-receptor CCR-5. *Nature* 384: 184-187

9) Dragic T., A. Trkola, S.W. Lin, K.A. Nagashima, F. Kajumo, L. Zhao, W. Olson, L. Wu, C.R. Mackay, G.P. Allaway, T. Sakmar, J.P. Moore and J.P. Maddon. 1998. Amino-terminal substitutions in the CCR5 co-receptor impair gp120 binding and human immunodeficiency virus type-1 entry. *J. Virol.* 72: 279-285

11) Zhang Y., **T. Dragic**, Y. Cao, L. Kostrikis, D.S. Kwon, D.R. Littman, V.N. KewalRamani and J.P. Moore. 1998. Use of co-receptors other than CCR5 by non-syncytium-inducing adult and pediatric isolates of human immunodeficiency virus type 1 is rare in vitro. *J. Virol.* 72: 9337-9344
12) Genoud S., F. Kajumo, Y. Guo and **T. Dragic**. 1999. CCR5-mediated human immunodeficiency virus entry depends on an amino-terminal gp120-binding site and on the conformational integrity of all four extracellular domains. *J. Virol.* 73: 1645-1648
13) Olson W.C., G.E.E. Rabut, K. Nagashima, D.N.H. Tran, D.J. Anselma, S.P. Monard, J.P. Segal, D.A.D.Thompson, F. Kajumo, Y. Guo, J.P. Moore, P.J. Maddon and **T. Dragic**. 1999. Differential inhibition of HIV-1 fusion, gp120 binding, and CC-chemokine activity by monoclonal antibodies to CCR5. *J. Virol.* 73: 4145-4155
14) Dragic T., A. Trkola, D.A.D. Thompson, E.G. Cormier, F.A. Kajumo, W. Ying, S.O. Smith, S. Lin, T. Sakmar and J.P. Moore. 2000. A binding pocket for a small molecule inhibitor of HIV-1 entry within the transmembrane helices of CCR5. *Proc. Natl. Acad. Sci.* 97: 5639-5644
15) Sanders R.W., L. Schiffner, A. Master, F. Kajumo, Y. Guo, **T. Dragic**, J.P. Moore and J.M. Binley 2000. Variable-loop-deleted variants of the human immunodeficiency virus type 1 envelope glycoprotein can be stabilized by an intermolecular disulfide bond between the gp120 and gp41 subunits. *J.Virol.* 74:5091-5100
16) Cormier E.G., M. Persuh, D.A.D. Thompson, S.W. Lin, T.P. Sakmar, W.C. Olson and **T. Dragic**. 2000. Specific interaction of CCR5 amino-terminal peptides containing sulfo-tyrosines with HIV-1 envelope glycoprotein gp120. *Proc. Natl. Acad. Sci.* 97: 5762-5767
17) Kajumo F., D.A.D. Thompson, Y. Guo and **T. Dragic**. 2000. Entry of R5X4 and X4 human immunodeficiency virus type 1 strains is mediated by negatively charged and tyrosine residues in the amino-terminal domain and the second extracellular loop of CXCR4. *Virology* 271: 240-247
18) Nagashima, K.A., D.A.D. Thompson, S.I. Rosenfield, P.J. Maddon, **T. Dragic** and W.C. Olson. 2001. Human ilmmunodeficiency virus type-1 entry inhibitors PRO 542 and T-20 are potently synergistic in blocking virus-cell and cell-cell fusion. *J. Inf. Diseases* 183: 1121-1125
19) Cormier, E.G., D. Tran, L. Yukhayeva, W.C. Olson and **T. Dragic**. 2001. Mapping the determinants of the CCR5 amino-terminal sulfopeptide interaction with soluble human immunodeficiency virus type 1 gp120/CD4 complexes *J. Virol.* 75:5541-5549
20) Thompson, D.A.D., Cormier, E.G. and **T. Dragic.** 2002. CCR5 and CXCR4 Usage by Non-Clade B Human Immunodeficiency Virus Type 1 primary isolates. J. Virol. 76:3059-3064
21) Cormier, E.G. and **T. Dragic.** The crown and stem of the V3 loop play distinct roles in Human Immunodeficiency Virus Type 1 envelope glycoprotein interactions with the CCR5 coreceptor: *submitted*

Reviews and Book Chapters

1) Olivier R., O. Lopez, M. Mollereau, **Dragic, T.**, D. Guetard and L. Montagnier. 1993. Prevention of early cell death in peripheral blood lymphocytes of HIV infected individuals by an anti-oxidant: N-Acetyl Cysteine in *Oxidative Stress, Cell Activation and Viral Infection*. Ed. Pasquier, C., Birkhäuser, Boston: p323-332
2) Dragic T., U. Hazan and M. Alizon. 1995. Detection of cell fusion mediated by the envelopes of human retroviruses by transactivation of a reporter gene in *Methods in Molecular Genetics* (Molecular Virology; vol.4) Ed. Adolph, K.W., Academic Press Inc., Orlando, Florida.
3) Paxton W.A., **Dragic, T.**, R.A. Koup and J.P. Moore. 1996. The -chemokines, HIV type-1 second receptors and exposed uninfected persons. *AIDS Res and Human Retroviruses* 12: 1203-1207
4) Moore J.P., A. Trkola and **T. Dragic**. Second receptors for HIV. 1997. *Current Opinion in Immunology* 9: 551-562
4) Dragic T., A. Trkola and J.P. Moore. 1997. The HIV co-receptors; gateways to the cell. *HIV: Advances in Research and Therapy* 7: 2-12
5) Moore J.P. and **T. Dragic**. 1999. See a pocket, sock it. *Nature* 401: 759
6) Dragic, T. An overview of the determinants of CCR5 and CXCR4 co-receptor function. 2001. *J. Gen. Virol.*: http://www.sgm.ac.uk/JGVDirect
7) Cormier, E.G. and **T. Dragic**. An overview of HIV-1 co-receptor function and its inhibitors. 2001. *HIV Mol. Immunol. Dat.*: 506-521

2000-present: Reviewer for Journal of Virology, Virology, Journal of General Virology, AIDS Research and Related Retroviruses, AIDS, Journal of Infectious Diseases, Journal of Experimental Medicine